Matching higher education with the labour market in the knowledge economy

The much-needed reform of university governance in Italy

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Abstract: It is argued that in the knowledge economy and in the context of the current restrictions on public finance, matching the output of higher education with the needs of the labour market is not simply one of many key issues for policy makers addressing the sustainability of higher education: it is 'the' issue. As the sources of funding for universities are almost entirely domestic and, in most countries, primarily governmental, politicians are expected to ensure that increasing public investment in higher education is justified in terms of the benefits accruing to the domestic workforce and investors. In so doing, they must avoid disrupting the international, free community of scholars and students engaged in the pursuit of knowledge and, thus, destroying the historical source of wealth creation that academia represents. This article considers the current debate in Europe and recent research on the interactions between universities and labour markets. The reform of university governance in Italy, regarded as much-needed and overdue, is evaluated in this context; and the assumptions on which such reform might be based, and the potential for aligning higher education more closely to the labour market. are examined.

Keywords: university governance; new managerialism; knowledge economy; labour market; Italy

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This study explores some key proposals for the reform of governance in Italian universities, in the context of the transformation of higher education (HE) and the relationship of HE with the labour market. The premise of this paper is that improving career opportunities for students should be the principal objective of a modern university and that this is the main expectation of

students and their families – hence the explicit reference in the title of the paper, to 'matching higher education and the labour market'. Because most European universities are in the public sector, a critical policy tool in the control of European governments is the possible reformation of the governance of universities coupled with appropriate incentives being offered to

improve the alignment of HE with the needs of the labour market.

The issue is increasingly relevant in what is defined as the *knowledge economy*: 'The knowledge economy conjures a world of smart people, in smart jobs, doing smart things, in smart ways, for smart money, increasingly open to all rather than a few' (Brown and Hesketh, 2004). It is generally accepted that the European knowledge economy increasingly requires a better-skilled workforce and there is the belief that a significant increase in the number of those entering HE will provide the solution. The European Union thus needs to improve access to HE and, despite national financial constraints, to increase funding for HE. It is the case that many European nations are experimenting with internal and external privatization in HE as a means of overcoming the constraints on public finance.

The idea of a knowledge economy (and society) incorporates the central role of wider participation in HE in economic competitiveness (World Bank, 2002; OECD, 1999; Peters, 2007; Crosier et al, 2000). Equal opportunities for access, expansion of educational resources and mass HE become crucial concepts and policy issues, in combination with internal differentiation of HE systems, diversification of HE funding streams and stratification of student populations. The key questions are how this further necessary expansion - an increase of 50% being needed, according to the EC (EC, 2005a) – is to be achieved in the context of existing governance, organizational, administrative and funding arrangements; and how this expansion can be translated into matching labour market needs and expectations. An EC paper accompanying the EU initiative New Skills for New Jobs: Anticipating and Matching Labour Market and Skills Needs highlights the need to increase substantially the attainment levels in HE and links the demands of technological change, globalization and new forms of the organization of work (EC, 2008b). The CEDEFOP (European Centre for the Development of Vocational Training) report suggests that on the basis of analyses from 25 EU countries almost 19 million new jobs in the EU by 2020 will require HE qualifications, as opposed to 13 million jobs requiring qualifications below graduate level and 12.5 million jobs requiring little or no formal education or qualifications (CEDEFOP, 2008). At the same time, the OECD has stressed that there is no evidence in the current data to suggest the occurrence of any 'crowdingout effects' - that is, the displacement of those with limited education or qualifications by better-educated individuals: '... on the contrary, there seem to be positive employment effects for individuals with less education in countries expanding their tertiary education' (Hanssen, 2007).

The expansion of HE through privatization that is both external (emergence of the private sector) and internal (cost-recovery mechanisms in the public sector, such as students' fees) raises crucial issues with regard to the employability of graduates. Although the links between public higher education institutions (HEIs) and the labour market have been studied thoroughly in Europe, the links between private HE and the labour market have been the subject of very little research. Internal privatization of public HEIs leads to further complications: for instance, in addition to 'traditional' students paying reduced tuition fees there are those paying higher, if not full, fees; and temporary and privately employed academic staff may work in the company of traditional, tenured lecturers and professors. In many European countries serious doubts have been raised about the skills and competencies of students graduating from newer, private HEIs and the future of such graduates in the labour markets is uncertain. Concurrently, the proportion of graduates from the private sector has been increasing substantially. It is agreed here that, as Levy states, '... it is impossible to understand contemporary expansion, including its size and contours and policy dimensions, without knowledge about both [public and private] sectors. It is also important to analyze dynamics between the sectors. What effects does a kind of access through one sector have on the other sector?' (Levy, 2008).

It is widely believed that the EU as a whole will need to provide for wider access to HE if it wants to maintain or increase its economic competitiveness. Across the globe, the index of enrolment into HE ranks only five EU-15 countries (and only nine EU-27 countries) in the first twenty (Porter *et al*, 2008): the EU compares badly with the USA in particular. The EU thus needs to improve equality of access to HE, to raise attainment levels and increase total investment, public and private, in HE. For example, in order to reach the levels of enrolment in HE of young people (aged 18–24) achieved in the USA, European institutions would have to increase current enrolment numbers by 50%.

A 'Skill-Biased Technological Change' approach (Machin and McNally, 2007; Machin, 2004; Machin, 1996) can be used to explain the changing role of HE in the knowledge economy: its basic premise is that new technologies which improve the effectiveness of production processes are 'skill-biased' – that is, bettereducated workers are more able to adapt to the new technologies than those less well-educated (Brown *et al*, 2001). 'This non-neutral technological change makes higher educated workers much more attractive for employers and therefore increases the demand for this type of workforce' (EENEE, 2008; see also Machin and McNally, 2007; Machin and Vignoles, 2005). Powerful

arguments in favour of the further expansion of HE are derived from OECD research and analyses, most recently from Machin and McNally in their OECD study of education systems and labour markets: '... in no case considered here can one speak of 'over-supply' of tertiary education. The strong, positive return to tertiary education suggests that 'under-supply' is more of an issue and that continued expansion is justified . . . If there were over-supply, relative wages and employment probabilities would fall to the level of their closest substitutes – and that has not happened' (Machin and McNally, 2007). What is causing the relative shift in demand is explained by the 'skill-biased technological change' thesis which proposes that new technologies are biased in favour of skilled workers. Appropriate expansion produces more individuals with the necessary, correct skills and competences: inappropriate expansion produces more individuals mismatched, horizontally or vertically, to the needs of the labour market.

It can be anticipated that HE in Europe will experiment widely over the next ten years with the dynamics of the public-private relationship, including issues such as teaching and research funding, contractual obligations of academic staff, blurring of the boundaries between public and private sector organizational structures, policies and procedures, administration, management and governance and the divergence between teaching and research institutions. This may occur, in some countries, by increasing the number of private institutions and increasing their enrolment numbers; and in other countries by changing the legal status of public institutions to that of private ones (or non-state, opting-out of the public system in favour of foundation-based institutions, a possible third category, as in the Saxony, North-Rhine Westphalia and Baden-Württemberg regions of Germany and in Sweden). In other countries it may occur through the introduction, or increasing the level, of tuition fees, with accompanying loan programmes likely to take precedence over non-repayable scholarships: Johnstone has written about the subject of fees and loans, from the perspective of equality of access (Johnstone, 2006). In all instances the themes of academic entrepreneurialism, further diversification of funding sources and the increasing role of 'third-stream' funding in university budgets are expected to be discussed and given serious consideration, with the aim of simultaneously ensuring the financial sustainability of national systems, their openness to new segments of society (expanded access) and their responsiveness to labour market needs. Reforming university governance is regarded as a precondition for the accountability of universities, to external stakeholders, and for improving their

performance, to bring together all the above themes and meet the demands of the labour markets. It is argued that it is a responsibility of national governments to provide guidelines for effective reform of HE governance.

Matching HE and the labour market

A mismatch between education and skills occurs when '... there is a difference between the skills a worker provides and the skills necessary for the job. In particular, working in a job below an individual's level of skills limits individual productivity and leads to 'underutilization of education' (EC, 2008a). In a recent successful EU REFLEX project on flexible professionals in the knowledge society, the variable termed 'mismatch' is based on '... the respondent's self-assessment of his/her job in relation to his/her education. Self-assessment is viewed as the best available measure concerning the measurement of education-job mismatch'. Consequently, graduates may be grouped into five categories of severity of mismatch: no mismatch; horizontally mismatched (working in a job matching one's own level but not one's own field of study); vertically mismatched (matching one's own field but not one's own level of education); both vertically and horizontally mismatched; and unemployed (REFLEX, 2007).

The difference between educational mismatch and skills mismatch is important – they are related but not the same. As a recent study summarizes, "... educational mismatches by no means imply mismatches between available and required knowledge and skills . . . Many graduates in 'matching' jobs nonetheless report skill mismatches' (Allen and de Weert, 2007). In this context, does privatization lead to further inequalities, differentiation and stratification? Or does privatization reduce inequality of access? Empirically-based answers could be provided using evidence from studies of the economic rewards and job satisfaction indicators from the same undergraduate degrees (fields of study) achieved in differentiated (public and private) institutions, as a proxy for self-assessment by the graduates surveyed and interviewed; however, such studies, to the best of the present author's knowledge, remain nonexistent.

There is general agreement that matching HE output and labour market needs is a critical requirement with regard to the skills and competencies of current and future citizens of knowledge societies and workers in knowledge economies. So, it is a cause for alarm that a substantial mismatch exists between labour market expectations of education and training institutions and the output of these organizations: this is now being

reported more widely than before. HE is at the centre of fierce national and international debates on economic competitiveness, the future role of graduates in national and global labour markets and transformation of the labour market itself. HE has not previously featured so highly on national and EU agendas: these agendas link HE strongly to new, economically-important roles, missions and tasks. HE, perhaps for the first time in its modern history, is being forced, by governments and their funding agencies, the general public and its accreditation and evaluation agencies and mechanisms, students and parents, to adapt to the changing social and economic realities of the knowledge society and the knowledge economy. The traditional stakeholders of HE are becoming more powerful and are demanding reconsideration of the roles, missions and tasks of HEIs.

The reason for the renewed interest in HE across the EU – and especially with regard to HE links to the labour markets and innovation - has been clearly stated by the European Commission: while responsibilities for universities lie essentially at national (or regional) level, the most important challenges are 'European, and even international or global' (EC, 2003a). The major challenges facing Europe - related to both globalization and demographics - such as loss of heritage and identity, economic recession and abandoning the European social model should, according to a recent influential European Commission report (EC 2005c), be met through education, knowledge, and innovation: 'The most appropriate response to these challenges is to increase the capacity of Europe to create, absorb, diffuse and exploit scientific and technical knowledge, and that, to this end, education, research and innovation should be placed much higher on the European policy agenda' (EC, 2005c).

Thus, in recent years the future of public universities in Europe has been the subject of intense consideration and debate, in the context of the particular, EU perspective. For the first time since 2000 new ways of thinking about HE have been formulated at an EU level and this has been accompanied by a number of practical measures, coordinated and funded by the European Commission. Responsibility for HE, in recent decades hitherto delegated to individual nation-states, is now returning to the forefront of discussions about the future economic competitiveness of the EU.

The economic future of Europe increasingly depends on investment in knowledge and innovation and on making the 'free movement of knowledge' (the 'fifth freedom', the other four being freedoms of movement of goods, services, people and capital) a reality (EC, 2007); and '... the success of the Lisbon strategy hinges on urgent reforms [of HE systems in Europe] ... ' (EC, 2003b).

The impact of globalization on EU-level educational policies and strategies, and increasingly on ensuing national policies and strategies, is substantial. HE is being scrutinized in the context of both globalization and 'Europeanization'. Indirectly, globalization – for instance through the Lisbon Strategy for growth and jobs – alters fundamentally the lenses through which universities are viewed, assessed, and measured. The most evident impact of globalization on HE is the overall sense that universities in Europe need to undergo profound transformations if Europeanization is to be able to respond successfully to the challenges of globalization. Based on a review of recent EU and OECD documents, reports, working papers and communications, the conclusion reached is that the relationship between government, labour markets and universities is in need of profound change (see, for example, OECD, 2004, 2006, 2008a and 2008b).

HE and labour markets: publications and debate

Privatization of HE and labour market needs In some reports on scholarly research (Clark, 2004; Sporn, 1999a; 1999b; Shattock, 2005; Shattock, 2008; OECD/IMHE, 2005) and policy documents, including in particular the management, organizational and financial solutions offered to public HE, reference is increasingly made to such notions as academic entrepreneurialism in teaching, research and Third Mission activities; academic institutions becoming increasingly financially self-reliant and significantly less dependent on core, state funding (diversification of funding sources, non-core, non-state income, third-stream funding, etc); and cost-sharing in the form of introducing, or increasing where already in existence, tuition fees, accompanied by more student loans and fewer student scholarships (Shattock, 2005; Williams, 2003; Johnstone, 2006). All of these issues feature prominently in recent national and EU-level debates on financially sustainable HE in Europe and in debates about the future of both the European Higher Education Area (EHEA) and the European Research Area (ERA). Such measures are the subject of intense discussion, including scholarly discourses, in many countries: the level of their implementation varies considerably, from nation to nation.

Various European countries (and, especially, transition countries in the 1990s) have been experimenting with the privatization of various segments of the welfare state, including the provision of cash benefits (such as old-age pensions) and benefits in kind (such as health care and HE) (Barr, 2004; Barr, 2001). The traditional welfare state is often viewed as

'overburdened', operating under increasing financial pressures and these pressures, directly or indirectly, affect publicly-subsidized HE systems because of the competitive nature of public funding. Nicolas Spulber stresses that 'Whatever its form, a privatization program involves a broad redefinition of the role of the state and of its relations to the market and the society. Specifically, it aims at shifting the prevailing balance between the public sector and the private economy, by rolling back the state's power and activities via public ownership and public services – but in practice its impact is far more widespread' (Spulber, 1997; see also Enders and Jongbloed, 2007; Belfield and Levine, 2002).

Public HE is in the 'eye of the storm' with regard to the escalation of the costs of all public services and it has to demonstrate clearly the value of the services it provides. The major issue for the general public and for policy makers is that the value placed on whatever HE produces is relative, in terms of the value of the social results that might be achieved by the same resources being used elsewhere. Increasingly, and in parallel with debates on the mission of academia, the problem of public HE is recast '. . . in terms of resources available to achieve them' (Salerno, 2007). The future of public HE is being considered to a greater extent in largely financial terms (Maassen and Olsen, 2007).

A crucial role in the introduction of privatization in major public services is played by the wider political, economic and legal context. Because of changing European demographics and the ageing of European populations, the costs of health care and pensions are not only very high but also are increasing as a proportion of GDP in almost all western EU countries (Pestieau, 2006). Competition for tax-generated public funding has been growing so that current and future financial scenarios involve a higher influx of private funds for research and development, through technology transfer and corporate contracts; and to HE through student fees.

If privatization is regarded as a process or tendency in which universities assume the characteristics of, or operational norms associated with, private enterprise, then the privatization of HE could be said to be flourishing in many European countries. In general terms, privatization is '... the transfer of activities, assets, and responsibilities from government/public institutions to private individuals and agencies. Education can be privatized if students enrol at private schools or if higher education is privately funded' (Belfield and Levin, 2002).

The emergence of powerful market mechanisms in public HE and the emergence (in the newer EU member countries) or existence (in the older EU member countries) of the private sector are two different aspects of the same process of the privatization of HE, referred to here as internal and external. HE in general has traditionally been considered as manifesting itself in two opposing modes: either public or private. The radical distinction between the public and private sectors has been a constant point of reference in both research and policy analyses. However, both sectors can also be analyzed as if following the same route of privatization if the phenomenon is applied more broadly to HE in general. As Daniel C. Levy stressed, 'Institutions called private and public are not always behaviourally private and public, respectively' (Levy, 1986). This description applies well to HE in European countries. Regarding their links to the labour market, the issue of the changing skills needs in Europe has been discussed in particular in such recent reports such as the CEDEFOP publications, Future Skill Needs in Europe: Synthesis Report and Future Skills Needs in Europe: Focus on 2020 (CEDEFOP, 2008), Origins and Consequences of Changes in Labour Market Skill Needs from the European Experts on the Economics of Education (EENEE, 2008) and European Employment Observatory publications. The importance of skills needs was recently stressed in a new EU initiative, 'New Skills for New Jobs' (EC, 2008a; EC, 2008b), an important social component of the 2008 European Economic Recovery Plan (EC, 2008c).

The market (quasi-) in HE and new forms of income generation

With the growing significance of the market perspective and increasing financial accountability for all public services, accompanied by growing competition for public funds, European HEIs are expected to respond to changing financial situations by seeking new sources of income – largely non-state, non-core, and non-traditional.

HE in general and top-ranked research-intensive universities in particular are, in contrast to healthcare and pensions, perceived by European societies as being able to generate their own additional income through entrepreneurship or cost-sharing (such as 'fees'). The more successful public entrepreneurial universities are today, the better are their chances of being permitted to pursue entrepreneurism in the future. Together with the introduction of market forces in pension systems (multi-pillar schemes rather than 'pay-as-you-go') and healthcare systems (privatization based on additional, private, individual insurance policies) the most far-reaching consequences of this trend towards marketization and privatization, especially but not exclusively in newer EU member states, can be expected to arise with public funding for HE and

research. As William Zumeta stressed, '... unlike most of the other state budget components, higher education has other substantial sources of funds that policy-makers feel can be tapped if institutions need to cope with deep budget cuts' (Zumeta, 2005).

One expected development – as a mostly new and reasonable policy solution to the problem of underfunding of European universities, especially compared with their counterparts in the USA and Japan – is the promotion across Europe of a more substantial influx of private research funds from the business sector and more private teaching funds from student fees. The EC recently stressed that '... it has been shown that free higher education does not by itself suffice to guarantee equal access and maximum enrolments' and invited member states to consider whether '... their current funding model ... effectively guarantees fair access for all qualified students to the maximum of their capacities' (EC, 2005d; see also Green, 2006; Kaiser and Vossensteyn, 2005; Kwiek, 2008; OECD, 2000).

The tension between the general attitude of governments and the public (education perceived as perhaps the primary asset of the individual) on the one hand and the inability or unwillingness of the very same governments to increase current levels of public funding for HE and research in public universities on the other is stronger than ever. As the EC stated recently, '... to attract more funding, universities first need to convince stakeholders - governments, companies, households that existing resources are efficiently used and fresh ones would produce added value for them. Higher funding cannot be justified without profound change: providing for such change is the main justification and prime purpose for fresh investment' (EC, 2005c). Consequently, incentives for transformation in the functioning of HE may arise through new funding arrangements (referred to by the EC as new 'contracts' between universities and societies).

Market forces in HE are on the rise worldwide: while the form and pace of this transformation are both different, in different parts of the world, the change is global in nature and is expected to have an impact on HEIs in Europe. Market forces formulate the behaviour of new private institutions and, more importantly, increasingly reformulate the missions of existing traditional public HEIs. The competition between public and private institutions in various parts of Europe will influence the core mission of public HE generally.

The most general, structural policy issues with regard to public universities (as presented in the EC, OECD and World Bank documents of the last decade, especially regarding funding) do not seem substantially different from the structural policy issues relating to other segments of the public sector. The major difference – namely, the widely acknowledged fact that universities have more options for diversifying their income – may lead to universities being viewed as even more financially self-reliant than before and potentially being much more amenable to new patterns of funding. The policy challenge at national levels is the extent to which particular countries are willing and able to accept global thinking about the future of public sector institutions in general (and of public universities in particular), and to what extent responses to this new way of thinking can vary in different countries: surprisingly, the worldwide reform agenda for universities of the 1990s was remarkably consistent (Johnstone, 1998).

Towards student-centred, labour-market focused universities

Within the European Higher Education Area, the role of new (and, previously, significantly less important) stakeholders will be enhanced in discussions at national and European Commission level. Universities will increasingly be expected to meet not only the changing needs of the state but also the changing needs of students, employers, the labour markets and industry and the regions in which they are located (see Arbo and Benneworth, 2006; Goddard, 2000; OECD, 2005; Tavoletti, 2004, 2005, 2007, 2008, 2009). The relationships between stakeholders are changing fundamentally the missions and roles of public and private HE, as the role of the state diminishes (especially in funding), the demands from students and labour markets grow for HE to become more teaching-oriented and industry and the regions expect the HE sector to be more research-oriented. Differentiation-related and stratification-related developments are causing significant change to take place in the academic profession, extending further its heterogeneity; and they have made a strong impact on the traditional relationships between teaching and research in European universities.

The social, political, cultural, and economic world is changing, as are student populations and educational institutions. HE is subject to powerful influences from all sides and all stakeholders, new and old alike: the state, the students, the academic staff, employers, and industry. In addition there is the fact that HE is becoming very costly to operate. Institutions are expected to transform themselves, in order to retain public trust (and secure their access to public subsidies). The role of the market in HE (or of government-regulated 'quasi-markets', see Teixeira *et al*, 2004) cannot be ignored, as the market influences and reshapes our lives as humans, citizens and, ultimately

in this context, as students or academic staff. The institution of the university is, perhaps for the first time, subject to prolonged pressure from many different stakeholders; and, as never before, it is now perceived by many, all over the world, as a failure with regard to meeting the needs of students and the labour markets. The literature on the mismatch between supply and demand is substantial (see Brown, 2004). The critical question, therefore, is which directions HE will be taking, while adapting to new social and economic realities in which the role of the market is growing and the education received by graduates is increasingly linked to their professional and economic future. This change of mood is expressed in an EU communication, 'Mobilising the Brainpower of Europe': 'If universities are to become more attractive locally and globally, profound curricular revision is required – not just to ensure the highest level of academic content, but also to respond to the changing needs of labour markets. The integration of graduates into professional life, and hence into society, is a major social responsibility of higher education' (EC, 2005c).

Following the transformations of all public sector institutions, universities in Europe – those traditionally publicly-funded and specializing in both teaching and research – are under strong pressure to review their missions and to compete for financial resources with other public services heavily reliant on the public purse. The consequences for the teaching and research agendas are far-reaching. As Deem stated, somewhat alarmingly, "... teaching-only universities per se (as opposed to higher education institutions in general) do exist in both public- and privately-funded forms in many countries, but at the present time this is not the norm in most of Europe. However, this may not continue to be the case in the future' (Deem, 2006). The trend of disconnecting teaching and research in HE has already started: as Vincent-Lancrin states in the summary of his analyses of OECD datasets, '... academic research might just become concentrated in a relatively small share of the system while the largest number of institutions will carry out little research, if any' (Vincent-Lancrin, 2006).

Graduates for regional labour markets

Research and teaching are being increasingly complemented by the 'third' university mission: the regional mission. This new Third Mission reflects the change in attitude of universities' external stakeholders: national and local governments, local businesses and industry as well as students and their parents. HE is increasingly perceived as a vehicle for the economic development of both the nation and of the region in whose social and economic fabric it is embedded (see

Goddard, 2000; OECD, 1999; Arbo and Benneworth, 2007).

There are well-established methodologies and templates of good practice for assessing the impact of particular institutions and regional systems on particular regions; and there are specific methods for monitoring their region-focused operation. Good practice demonstrates that internal mechanisms in HEIs are important in supporting their regional mission: these mechanisms include additional funding, new incentives, modified career ladder requirements, monitoring of failures and successes of ongoing regional engagement and cooperation with local industry via university boards. In addition there is a specific psychological barrier to overcome in institutions: that regional engagement is still regarded as inferior (and hence is ranked as an inferior academic activity) to that at national or international level.

Regional economic competitiveness cannot easily overcome low levels of national economic competitiveness: and HEIs, with their curricula and programmes and the scope of their regional Third Mission, represent but one of the many aspects of competitiveness. HEIs are often interdependent and endeavour to support each other (Porter *et al.*, 2008).

Although the expectations placed on HE are generally common to all institutions, there are many other, equally important factors which can be observed in the 'laboratory for HE privatization' that is Central and Eastern Europe. The chronic and severe underfunding of public HE in Eastern European countries such as Poland, Romania and Bulgaria resulted in an effectively constant search for temporary solutions. Some of these market-oriented solutions, for example those involving cost-sharing in the public sector or state authorities approving the expansion of the accredited private sector, albeit in the absence of state subsidies, became elements of national policies and legislation (Kwiek, 2008; Salmi, 2006). As Daniel C. Levy noted, 'Central and Eastern Europe lies at the extreme for the global generalization that private higher education emergence has been sudden, shocking, and unplanned' (Levy 2007).

However, in expanding HE, the burden of the costs of the educational system has increasingly been transferred from governments to students and parents, leading to often fierce national debates on fees, equality and efficiency (in the global context, see especially Teixeira *et al*, 2006; Pennel and West, 2005; for EU views on equality see EC, 2005b). The expansion of Polish, Romanian and Bulgarian HE was made possible by increased external and internal privatization, both of which were justified in terms of the opportunities provided by opening HE to the market. Two alternative

strategies to meet the growing demands for HE were used, both of which were implicitly, rather than explicitly, supported by the state: the emergence of privately-owned, teaching-focused, fee-dependent institutions; and the internal privatization of public sector institutions which enabled them to supplement their state subsidies with students' fees.

Reforming university governance in Italy: matching HE and labour markets

A critical analysis of the 'Government's Guidelines for the University'

Italian universities have taken particular notice of the substantial reforms being promoted by central government in Italy. In a document recently issued by the Ministry of Education ('Government's Guidelines for the University') the idea of a student-centred university – as discussed above in the present paper – is the clear statement that '... students, their needs and aspirations, must be put back into the centre of our mission'. In addition, the traditional model of governance, based on a community of scholars, is strongly criticized with regard to its perceived outcomes: '... internal stakeholders' demands were placed above those of students and young scholars, with results that, paradoxically, have increased the costs of teaching and at the same time excluded many deserving young people from the world of research. In 1998 . . . there were fewer than 50,000 professors and researchers, today there are more than 62,000, a total increase of 24% (although for full professors the increase was 46%), compared with a growth of 7% in the number of students'. The idea that the number of researchers should be linked to the number of students is symptomatic of the 'teaching-centred' concept of a university engendered by the government (aside from the fact that I will prove these quoted data to be entirely misleading with regard to international comparisons). Such a statement is very similar to the World Bank's view and the currently dominant perceptions of HE: "... the ownership of tertiary institutions has often shifted away from those who should be the main clients (student, employers and society at large) to control by the teaching staff. The raison d'être for some institutions has become to provide staff employment and benefits rather than to serve as educational establishments focused primarily on the needs of the students and the labour market' (World Bank, 2002).

The concept of a university becoming increasingly autonomous and independent of the national state is also being promoted by the Italian Government, with the result that universities are being permitted and encouraged to transform themselves into 'private

foundations' – what I have termed 'external privatization'. However, the vision of an autonomous and independent university is based primarily on financial independence and financial autonomy: in contrast, the Government's Guidelines retain the old idea that legislation and ministerial regulations should control and define in detail the organization of universities, departments and faculties, including such aspects as student/teacher and salaries/total university spending ratios; a nationally fixed salary for teachers; the number of academics required to establish a department or a faculty; the minimum number of students; the number of courses and curricula that can be offered; students' fees; and so on.

As far as the governing bodies are concerned, the main objective of the programme of reform is to achieve a distinction between the functions of the academic Senate and the Board of Directors, '... giving to the first ... the task of representing scientific and academic issues, and to the second ... the task of defining the guidelines for the strategic planning of the university as a whole, so to ensure a proper and prudent management, inspired by the general interests'. The aim of the reform programme is to shift the balance of power towards management staff (as representing external stakeholders and general interests). The community of scholars is able to express its demands to the Board of Directors through the Senate.

It is said in the government's paper that 'procedural control' by the government will be substituted by 'substantial control' (Braun and Merrien, 1999) through 'accreditation' - '... accreditation must therefore take responsibility for ensuring the substantial value of diplomas issued by the universities, overcoming a formalistic conception that is also not the least cause of some system degenerations' - and more general mechanisms of 'accountability': 'a culture of accountability to the outside must be developed, focusing on open communication of results in research, training, technology transfer and financing'. As has already been said, this declared vision contradicts detailed new legislation and ministerial regulations emanating from the government, with the result that both procedural control and substantial control are increasing.

The Government's Guidelines for universities need to be considered in the context of HE in other developed economies: 'Relative to GDP, the United States spends over three times more on tertiary education than Italy. . . and nearly four times more than Turkey and the partner countries Brazil and the Russian Federation' (OECD, 2009). Italian spending on tertiary education institutions as a percentage of GDP in 2006 was 0.9% (the lowest, 0.8%, is in Turkey and the highest, 2.9%, is

in USA, while the OECD average is 1.4%, so that Italy is in penultimate place in this league table, ahead only of Turkey) (OECD, 2009). The situation is not significantly different if spending on tertiary education as a percentage of total public expenditure is considered: it was 1.6% in Italy (in last position among OECD countries); 3.9% in the USA, 2.4% in the UK, 2.3% in France, 2.5% in Germany and 2.5% in Spain; and the OECD average was 3.1% (OECD, 2009).

The Italian government's belief that the increase in the number of academics cannot be justified when considered against the concurrently smaller increase in the number of students reveals once again the government's student- and teaching-centred concept of a university: it does not take into account the increasing requirements for research activities and research staff for Third Mission programmes. However, such a concept is not justified when the situation in other OECD countries is considered. For example, the ratio of students to teaching staff in tertiary education was 19.5 in Italy, 15.1 in the USA, 17.6 in the UK, 16.6 in France, 12.1 in Germany; and the OECD average was 15.3% (OECD, 2009). This indicates that HE in Italy does not operate with an excess of teaching staff but is, on the contrary, 27.5% below the OECD average in this regard. A similar state of affairs is apparent if the staff are considered in terms of their principal occupations, for instance academic staff, research assistants and administrative staff. For all the functional categories considered by the OECD, Italy is without exception below the OECD average with regard to the ratio of staff to students, showing that there is no surplus of staff but, rather, the opposite: a shortage (OECD, 2009). The supposedly unjustified increase in the number of teaching staff is regarded and emphasized by the government as the principal cause of distortion to the existing model of governance in which academics play a very central role; but data reveal the opposite - a shortage of teaching staff in comparison with the OECD average and the main Western countries, evidence of the fact that Italy was below average with regard to the number of teaching staff and has actually been catching up in this respect during the last few years.

The second principal distortion to the existing model of governance that the government highlights is the perceived high percentage of public expenditure on tertiary education that is apportioned to staff salaries. (In this context, the government considers 90% to be the maximum acceptable percentage; and exceeding this amount incurs the penalty of a universal ban on new recruitment in the offending, supposedly 'irresponsible' university). Again, a comparison with other countries, with specific reference to teaching salaries, does not support the hypothesis of Italy being an anomaly:

teachers' salaries in tertiary education in Italy represent 45.3% of the total expenditure on tertiary education (according to OECD criteria for 'total expenditure'), against the slightly lower OECD average of 43.4%; but higher percentages are reported in comparable countries such as France (51.8%) and Spain (59.7%) (OECD, 2009).

The key problems in Italy are neither the student-to-teacher ratios; nor staff salaries. The true, main anomalies are fourfold:

- (1) the low level of spending in tertiary education;
- (2) the low percentage of the population that has participated in tertiary education;
- (3) a very high level of unemployment amongst HE graduates; and
- (4) a highly idiosyncratic educational philosophy (Tavoletti, 2004).

The data about the low level of spending in tertiary education as a percentage of GDP and in comparison to other European countries have already been quoted. As far as the level of attainments in tertiary education are concerned, the percentage of the Italian population that has entered tertiary education in the age group 25–64 is 14%, half that of the OECD average of 28% (OECD, 2009). The situation is no different for the 25–34 or 35–44 age groups (19% in Italy against an OECD average of 34%; and 14% Italy against an OECD average 29%, respectively) and is even worse for the 45–54 and 55–64 age groups (11% in Italy against an OECD average 25%; and 9% in Italy against an OECD average of 20%, respectively).

Given such a low level of participation in tertiary education, a significant level of graduate unemployment might not be expected in comparison with the levels in other, comparable OECD countries, or the OECD average; but the opposite is true. In fact, graduates in Italy fare badly in comparison with post-secondary, non-tertiary individuals: 'In a few OECD countries, even young adults who have completed tertiary education are subject to considerable risk of unemployment when they enter the labour market. In Greece, Italy, Portugal and Turkey more than 10% of 25–29 year-olds with experience of tertiary education are unemployed. In these countries, together with Denmark, Spain and partner countries Israel and Slovenia, unemployment rates for upper secondary and post-secondary, non-tertiary graduates are lower than for those with tertiary qualifications in this age cohort' (OECD, 2009). The data collected by Almalaurea Consortium show similar results: '... in the early 2000s the recruitment of graduates planned by firms actually decreased, from 7.2 to 6.5% (between 2001 and 2003)' (Almalaurea, 2008). This is a long-term, deteriorating

situation and it is getting worse because of the current international financial crisis: '... the first two months of 2009, compared to the corresponding two months of the year before, show an overall decrease of 23% in requests for graduates, a contraction of demand which involves almost all academic disciplines, even those usually at the top of [the league table of] employment ([for instance, a] 35 % decrease in economics/statistics graduates and a 24% decrease in engineering)' (Almalaurea, 2008). Graduate unemployment does not imply the existence of a closed or privileged graduate employment market that is otherwise difficult for young people to access, because real wages have been decreasing in the last four years: '... a sore point is represented by wages that, five years after graduation, although nominally at €1,300 [per month] have experienced a significant decline, of about 6%, in real value in the last four years' (Almalaurea, 2008).

I believe that the fourth main anomaly in Italian HE is rooted in the combination of a very traditional philosophy and concept of knowledge that favours 'positional competition' (Tavoletti, 2004) and 'credentialism' and does not favour engagement with students, the economy and society at large. I would argue that a constructivist belief system and a new concept of knowledge will be needed for effective engagement with the economy and society, a hypothesis fully developed in previous theoretical work on the principal causes of graduate unemployment (Tavoletti, 2004) and now confirmed by recent OECD data: '... in all countries but Italy the average endorsement of constructivist beliefs is stronger than that of direct transmission beliefs. In most countries, therefore, teachers believe that their task is not simply to present facts and give their students the opportunity to practice, but rather that they should support students in their active construction of knowledge' (OECD, 2009). The fact that Italy is the only OECD country in which the "... average endorsement of constructivist beliefs is not stronger than that of direct transmission beliefs' (OECD, 2009) is significant and recent evidence in support of the conceptual framework and explanation I have provided for high levels of graduate unemployment in Italy (Tavoletti, 2004), because I have postulated that a non-constructivist belief system is the main symptom of a traditional concept of knowledge that does not favour any greater engagement of HE with its surrounding economies and does not favour graduate employment.

These anomalies in Italian HE are stressing the system to its limits: bold and brave action is urgently needed, at the highest level of governance, if mistrust and contempt are not to prevail among external stakeholders and in public opinion at large. Given the

existing Italian system of rules, it is incumbent upon the national government of Italy to design a new framework for university governance.

Recommended reform of university governance Previous work (Tavoletti and Lazzeretti, 2006) has described 'where' and 'how' university governance is changing in Europe and globally. The traditional continental (European) model of governance, defined as 'bureaucratic-oligarchic' (Braun and Merrien, 1999), in which all the substantial power rests with academics and with tight procedural and legal control delegated to the national State, is no longer a sustainable option. Such a model is widely considered now as a deviation of purpose, '... [it may] almost be described as a form of privatization of public institutions to the benefit of specific internal stakeholder groups' (World Bank, 2002). Such a view arises because the traditional pillars of von Humboldt's model of the university are vanishing under increasing political and financial pressure:

- from 'solitude and freedom' to local, social and economic engagement, and accountability to the different stakeholders to which the university is beholden (national government being just one such);
- (2) from a 'protected space' to an unprotected one;
- (3) from a 'cultural belief system' to a service belief system;
- (4) from the 'teaching-research nexus' to an increasing separation of each; and
- (5) from 'Academe self-rule' to the need for specialist managerial skills.

'Knowledge economy' and 'knowledge society' are increasingly important concepts in the process because they imply that universities can no longer be isolated providers of high quality research and teaching, since the creation of first-class theoretical knowledge is, in many fields, strongly 'linked to' and desperately 'in need of' industrial application. This is what Gibbons has described as the shift from 'Mode-1' science (disciplinebased and with distinct boundaries), to 'Mode-2' science ('One of the characteristics of Mode-2 science, we claimed, was that knowledge was now being generated in the context of application. . . The implication of our argument was that science could no longer be regarded as an autonomous space clearly demarcated from the 'others' of society, culture and (more arguable) economy. Instead all these domains had become so 'internally' heterogeneous and 'externally' interdependent, even transgressive, that they had ceased to be distinctive and distinguishable. . . ') (Gibbons et al, 2001). In many academic disciplines the development of knowledge outside the context of

application no longer makes sense: one can consider, for example, the 'hard' sciences, the pharmaceutical industry, biotechnology, information technology and engineering, all increasingly linked to industrial applications and funded by industry; and medicine, which is increasingly linked to technology and science and social sciences and the arts, where technical innovation and commercialization pay a significant and increasing role. This is illustrated by the integration of first-class universities with clusters of innovative firms or dynamic urban areas, resulting in increasing interchange of ideas, people and financial resources between universities and external organizations. The implications for universities are quite clear: they should become more transparent and accessible for external stakeholders because in a Mode-2 society and a borderless HE environment the boundaries between inside and outside make less sense and do not increase the effectiveness of HE.

These transformations involve tight control being exercised by external stakeholders (for example, through financial agreements, direct managerial involvement or general influence and accountability), loose procedural control by the national state (with increasing HE autonomy or even the option of becoming a private foundation) and making universities much more entrepreneurial and relevant to the local economy (Tavoletti and Lazzeretti, 2005). They can be summarized as the 'new-managerialism governance model'. Such a model – that is, combining loose procedural control with tight, substantial control by national government and external stakeholders – seems to be an effective option for Western Europe in general and Italy in particular. It is compatible with tradition in a world that, in contrast, is moving rapidly towards a brave new 'market model' of governance in HE with very loose substantial and procedural control by the national government. Eastern European countries represent a constrained laboratory of experimentation for the 'market model', as has been highlighted earlier in this present paper; but several issues are emerging in terms of the ability of the model to match HE and the needs of the labour markets. The most advanced and successful experiences with the 'new managerialism model' are to be found in the Netherlands and the United Kingdom: they could be a model for Italian universities.

The temptation to delay any transformation in order to preserve the traditional 'bureaucratic-oligarchic' model would be damaging for universities and graduate employability; and pointless, even, given the forces at work. It has been argued convincingly elsewhere (Paletta, 2004) that the 'new managerialism' governance model could be implemented in Italy, delegating all

managerial and executive functions to a small professional board of directors (consiglio di amministrazione) having exclusive jurisdiction over strategic planning and the financial balance sheet. Such a board of directors would be nominated and chaired by, and accountable to, the Rector, subject to a positive vote of confidence and acceptance by the Senate: managers would be chosen mainly from outside the university, selected on the basis of their managerial competence and recognized abilities. The academic Senate would continue to act as the main democratic body in the university, being elected by a broad constituency and having exclusive jurisdiction over regulations and statutes, academic issues, rights and duties of students, academics and staff and without any significant overlap of competence with the board of directors. The Senate would define the politics of the university and would give legitimacy to the board: it would protect freedom of teaching and research. The Rector would continue to be appointed by a broadbased, internal electorate.

Such a project of reform represents a clear departure from the bicameral system (in which there is a continuing overlap of jurisdiction between the Senate and the board of directors) because the university would be governed solely by the executive board of directors, within the institutional policies defined by the Senate. The board would not be elected: it would be appointed irrespective of any prevailing political issues. Equally, the board should not represent or protect internal stakeholders: on the contrary, it should provide legitimacy with regard to external stakeholders and provide a guarantee that the university does not act in the sole interest of its internal constituencies.

Of course there is the opposing risk that members of boards selected outside the university might act in the sole interests of external stakeholders they might represent. Such a risk could be very significant in Italy because of prevalence of overlapping interests and political institutions (for instance, national government, regions, provinces and municipalities). Kerr and Grade (1989) have identified three unsatisfactory types of boards with independent members:

- (1) external cosmetic boards, where publicly famous and well-known members enjoy consensus with external stakeholders and are able to attract funds, but devote little time and effort on activities on behalf of the institution:
- (2) selected policy boards, where members are only interested selectively in the overall agenda and do not attend all relevant meetings, or do not pay attention to all the policy issues; and

(3) selective administrative boards, where members are selectively interested in secondary management issues such as choosing a supplier or a consultant, selecting buildings, locations and courses.

Such descriptions serve to demonstrate that boards with independent members can be ineffective: even if the members do not pursue personal interests, they could represent the interests of specific external stakeholders. For that reason, in order to balance the interests of external and internal stakeholders, it is important that the board of directors is selected by the Rector and approved by the Senate.

Conclusions

The proposed model of governance would preserve the idea of a university as a community of students and scholars: in fact, the participation of academics in the university would not be weakened in favour of external members, but it would be based on different criteria. The active participation of academics, staff and students in the governance of the university, and their ability to determine, to an extent, the structure and form of the academic environment, are more than esoteric democratic ideas or '... romantic attachments to the idea of a community of scholars. They are an evident precondition for attracting, nurturing and retaining the best scholarly minds and for fulfilling the mission of the university to pursue independent critical inquiry' (Coaldrake et al, 2004). The traditional collegiate model of self-governance may be out of step with reality, but scholars cannot be regarded simply as 'human resources' to be deployed to meet the objectives of the board of directors: they cannot be because, if such a view prevailed, the best scholars would be neither attracted nor retained, excellence would not be achieved and the best employment opportunities for graduates would be lost. The 'Government's Guidelines for the University' do not give sufficient or appropriate attention to these issues: accountability and cost-saving are preferred to performance (that is, to provide excellence in teaching, research and Third Mission activities) with the resulting possibility that a shift of power in favour of external stakeholders might occur. The governance model that has been proposed, in which the Senate is pre-eminent, has similarities with the governance models in place in some public Italian universities – for instance, Tor Vergata (where the four members of the board are proposed by the Rector, based on their managerial competences, and appointed by the Senate), Torino (where the eight members of the board are appointed by the Senate, based on 'adequate expertise and proven professional experience in

management and organization') or Ca' Foscari (where 'at least a three years top management experience in public or private organizations is required' of the members of the board). All were able to avoid management overlap, between the senate and the board: executive authority was delegated in full to the board. Private Italian universities (14 universities with 7% of total national enrolments) seem to favour models of governance with a pre-eminent board whose members are appointed by main sponsors: the pre-eminence of the board in public universities raised many issues about transparency and effectiveness (Paletta, 2005; Trento in this study being a virtuous and peculiar exception).

The 'new managerialism' governance model, which specifies an independent managerial executive board for the university and loose procedural control by national government combined with increased accountability to and substantial control by the national government and external stakeholders, should favour competition among universities, a more responsible policy for recruitment (this being one the main areas of concern in the Government's Guidelines) and is a precondition for satisfying the main demands of external stakeholders (of which matching labour market demands and HE is the most important). In particular, it should move the system from a legalized culture of procedural control and formal correctness to a culture of incentives and managerial effectiveness: 'In the absence of appropriate incentives, the rules are made to be circumvented. In an attempt to prevent it, will be issued other rules, which will also be circumvented, and so on. If more rules are accumulated more opportunities are created to use them for fraudulent purposes. The result is an even more stifling bureaucracy but no change in substance, and an exhausting war of nerves to circumvent the rules and fight those who try to circumvent them: all the time consuming activities of minds that would otherwise be employed' (Perotti, 2008). Unfortunately the 'Government's Guidelines for the University' mostly retains the belief that the system can be effectively changed through the introduction and enforcement of new, additional and better rules.

The prospect of the introduction of a 'new managerialism' governance model in Italian universities, with a professional executive board, frightens many; and this fear is manifested by delays in emulating the most successful international HE experiences, where the dilemma between purity of knowledge and 'commercialization' of knowledge has been successfully managed. Thorstein Veblen wrote in 1918 that the defects of the American academic system were attributable, in the words of the subtitle of his work, to 'the conduct of universities by business men'

(Veblen, 1918); and Harvard alumnus John Jay Chapman wrote in 1909 that '. . . the men who control Harvard today are very little else than businessmen, running a large department store' (in Bok, 2003). History has proved their fears to be groundless, if one considers the status of academic pre-eminence these large American universities have been able to achieve in the subsequent one hundred years. One may wonder if Italy is not one hundred years late in this debate.

The dilemma raised by Branscomb in 1999 is more relevant now than ever before: '... universities are by tradition – one might say by intellectual necessity – open to participation by scholars all over the world. Yet their sources of funding are almost entirely domestic and, in most countries (including the United States), primarily governmental. Politicians may be expected to ensure that the benefits of university research are effectively, if not primarily, captured by domestic workers and investors. . . ' (Branscomb, 1999). We must hope that politicians seeking to reform university governance, both at national and regional levels, through different forms of internal and external privatization, will be able to secure such benefits to the national economy and provide a satisfactory match between HE and the labour markets without destroying academe in its role as the historical source of wealthcreation. This article has offered some suggestions for successfully achieving this.

As far as future research is concerned, the following four areas are proposed:

- (1) The impact on governance of internal and external forms of privatization of HE. Internal privatization may transform the fundamental mission, governance, aims, organization, management styles, funding patterns, labour relationships and institutional cultures of public educational institutions. External privatization – that is, growth of private institutions – generates direct or indirect competition between public and private institutions, with possible large-scale indirect impact on organization, management styles, funding patterns, labour relationships and institutional culture of public educational institutions. The initial hypothesis is that both internal and external privatization will transform the governance of public universities, requiring them to become more effective.
- (2) Governing academic entrepreneurship of private and public HEIs. The initial hypothesis is that academic entrepreneurship in the private sector is considerably less extensive than is assumed in policy debates, because the sector seems to be heavily (in some countries, almost totally) dependent on student fees, leaving few opportunities for diversification of

- funding sources. It is assumed that the hypothesis is valid in all the five major aspects of academic entrepreneurialism: a strengthened core, an expanded developmental periphery, a diversified funding base, a stimulated academic heartland and an integrated entrepreneurial culture (Clark, 1998; Shattock, 2000, 2003, 2005; Williams, 2003).
- (3) Public and private graduates in the labour market: governing employability. It may be assumed, albeit on the basis of little available research, that private sector graduates concentrate on employment in certain, selected fields only; that is, social science, commerce and law, ignoring - in most countries fields such as science, health or architecture and engineering (but depending on national taxonomies: see Amaral and Magalhães, 2007). The initial hypothesis is that the mismatch between the skills of private sector graduates and labour market requirements (as might be revealed using, for instance, in-depth interviews and web-based surveys of graduates and employers in high-skill jobs) is smaller than that which occurs with public sector graduates. The hypothesis further proposes that the links to the labour market of selected study programmes shared by both public and private sector institutions will be stronger for private institutions in the older EU countries and weaker in newer EU countries, as a result of the faster growth of the private sector and the lower level of competition offered by the underfunded public sector in the latter
- (4) Governing the teaching-research divide in the private and public sector. The initial hypothesis is that the dynamics of the private-public relationship in HE affect the academic profession in both sectors. However, while numerous comparative studies focus on the changing nature of academic work, job satisfaction, contractual and labour relationships in the public sector, there is a critical need to address issues hitherto not studied in depth by research into the changing academic profession in the private sector, to identify and record the dynamics of the transformations. The hypothesis proposes an emergent structural isomorphism of change in the two sectors and the increased impact of private sector organization, management styles and contractual and labour relationships on public sector institutions. While the teaching-research divide has already been achieved in the private sector, the contrast between the private and public sectors may be diminishing, as a result of increasing trends towards locating and funding (with both public and private finance) research outside HE. Thus, the hypothesis proposes the occurrence of increasing

isomorphism between public and private sectors – that is, the public sector becoming more structurally similar to the private sector; and both sectors being significantly more involved in the regional, Third Mission.

The above are closely inter-related and inter-dependent and, it is suggested, deserve future study, on the basis of comparative empirical evidence.

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